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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/575,182	05/23/2000	Kia Silverbrook	PP01US	9168
24011	7590	08/11/2004	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			RAHIMI, IRAJ A	
			ART UNIT	PAPER NUMBER
			2622	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/575,182

Applicant(s)

SILVERBROOK ET AL.

Examiner

(Iraj) Alan Rahimi

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on May 25, 2004 have been fully considered but they are not persuasive.

Applicant argues that Iwata and Drake are not combinable. Examiner disagrees. Both references teach printing of images on a substrate. Iwata teaches in column 8, lines 40-53 printing of images by scanning motion of the print head 13 using the carriage 15 (see Fig. 3). Drake discloses printing of an image using the print bar 10, which is page wide (column 3, lines 35-46). The multipass printing as outlined in column 4, lines 16-21 is an additional mechanism and therefore is not necessary for the operation of the printer. Although the term multipass is used in the reference it is not meant to be the typical pass that print head scans from left to right in the entire row for printing of additional dots. The multipass mechanism in Drake is used by way of offsetting the print bar by a small amount as directed by cam 44 to print over the dots that previously omitted by the malfunctioning nozzles. Applicant also argues that ink reservoir and the printhead are not disposed in an elongated body. Examiner refers to Fig. 1, where it shows ink reservoir 16 and the printhead 10 within an elongated body. Since Iwata requires moving parts driven by motor for moving the print head the motivation to combine Drake with Iwata would have been to reduce the moving parts in the printer of Iwata by using a fixed printhead.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata (US patent 6,609,711) in view of Drake et al. (US patent 6,089,693).

Regarding claim 1, Iwata discloses a printer module for a compact printer system comprising:

an elongate body 2 having a longitude axis (Fig. 1);

the body having two opposing slots 6 and 10, the slots being parallel to the longitudinal axis and interconnected by a paper path, which passes through the body (Fig. 3);

powered rollers 12 and 12a for moving a printable media through the paper path and past said stationary printhead;

a storage device RAM 55 within said body for storing an image to be printed by said printhead; and

However, Iwata does not disclose a stationary printhead housed within said body, an ink reservoir within said body and communicating with said printhead and printhead printing said image on substantially the full width of said printable to media in a single pass.

Art Unit: 2622

Drake discloses a stationary printhead 10 housed within said body, an ink reservoir 16 within said body and communicating with said printhead and printhead 10 printing said image on substantially the full width of said printable to media in a single pass (column 3, lines 36-37).

Iwata and Drake are combinable because they are from the same field of endeavor that is printing art. At the time of invention it would have been obvious to a person skilled in the art, to use print bar of Drake to print images across the page. The motivation to do so would have been to reduce the moving parts in the printer of Iwata by using a fixed printhead. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to combine Iwata with Drake to obtain the invention as claimed.

Regarding claim 2, Iwata discloses the printer module of claim 1 further comprising a controller (CPU 52), said controller controlling operation of said printer module (column 8, lines 40-53).

Regarding claim 3, Iwata discloses the printer module of claim 2 wherein said storage device is flash memory RAM 55 associated with said controller (column 8, lines 40-53).

Regarding claim 4, Iwata discloses the printer module of claim 2 wherein said controller includes a device (print driver 62) for transferring said image to said printhead (column 8, lines 40-53).

Regarding claim 5, Iwata discloses the printer module of claim 1 further comprising a sensor S1 for detecting said printing media and activating said means for moving said printing media in response to said detection (column 9, lines 5-15).

Regarding claim 7, Iwata discloses the printer module of claim 1 further comprising at least one connector at an end of said body for connecting one or more further modules to said printer module and a bus providing power and data between said printer module and said one or more further modules (column 5, lines 40-56).

Regarding claim 8, Iwata discloses the printer module of claim 1 wherein the elongate body is substantially cylindrical (Fig. 2).

Regarding claim 9, Drake discloses the printer module of claim 1 wherein the printhead is a monolithic drop-on demand inkjet printer (print bar 10).

Regarding claim 10, Iwata discloses the printer module of claim 1 wherein the means for moving printable media comprises a motive means driving one or more powered rollers 12 adjacent one or more neutral rollers 12a.

Regarding claim 11, Iwata discloses the printer module of claim 10 wherein the motive means is an electric motor and gearbox (column 4, lines 49-57).

Art Unit: 2622

Regarding claim 13, Iwata discloses the printer module of claim 10 wherein the powered rollers are located on opposite sides of the printhead (Fig. 3).

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata (US patent 6,609,711) in view of Drake et al. (US patent 6,089,693) and further in view of Yokoyama (US patent 5,706,101).

Regarding claim 6, Iwata in view of Drake do not disclose the printer module of claim 1 further comprising a power source within said housing. Yokoyama discloses rechargeable battery 11. Iwata and Yokoyama are analogous art because they are from the same field of endeavor that compact printers/facsimile devices. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to use the rechargeable battery for extended operation when AC power is not available.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata (US patent 6,609,711) in view of Drake et al. (US patent 6,089,693) and further in view of Schweid (US patent 5,959,290).

Regarding claim 12, Iwata in view of Drake do not disclose the printer module of claim 2 wherein said controller incorporates image processing and quality assurance integrated circuits. Schweid et al. discloses in column 14, lines 8-18 that scanning artifact detection system and method of his invention can be readily implemented on an application specific integrated circuit,

Art Unit: 2622

various logic circuits, or in software, thereby enabling the incorporation of this process in a scanner, electronic subsystem, printer, or other image processing device. Iwata, Drake and Schweid are analogous art because they are from the same field of endeavor that is image reading art. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to incorporate artifact detection system into an integrated system for use in printers.

### ***Conclusion***

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Iraj) Alan Rahimi whose telephone number is 703-306-3473. The examiner can normally be reached on Mon.-Fri. 7:30-4:00.




Art Unit: 2622

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles can be reached on 703-305-4712. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.

AR

Alan Rahimi  
August 5, 2004

  
TYLER LAMB  
DEPT EXAMINER  
Krima